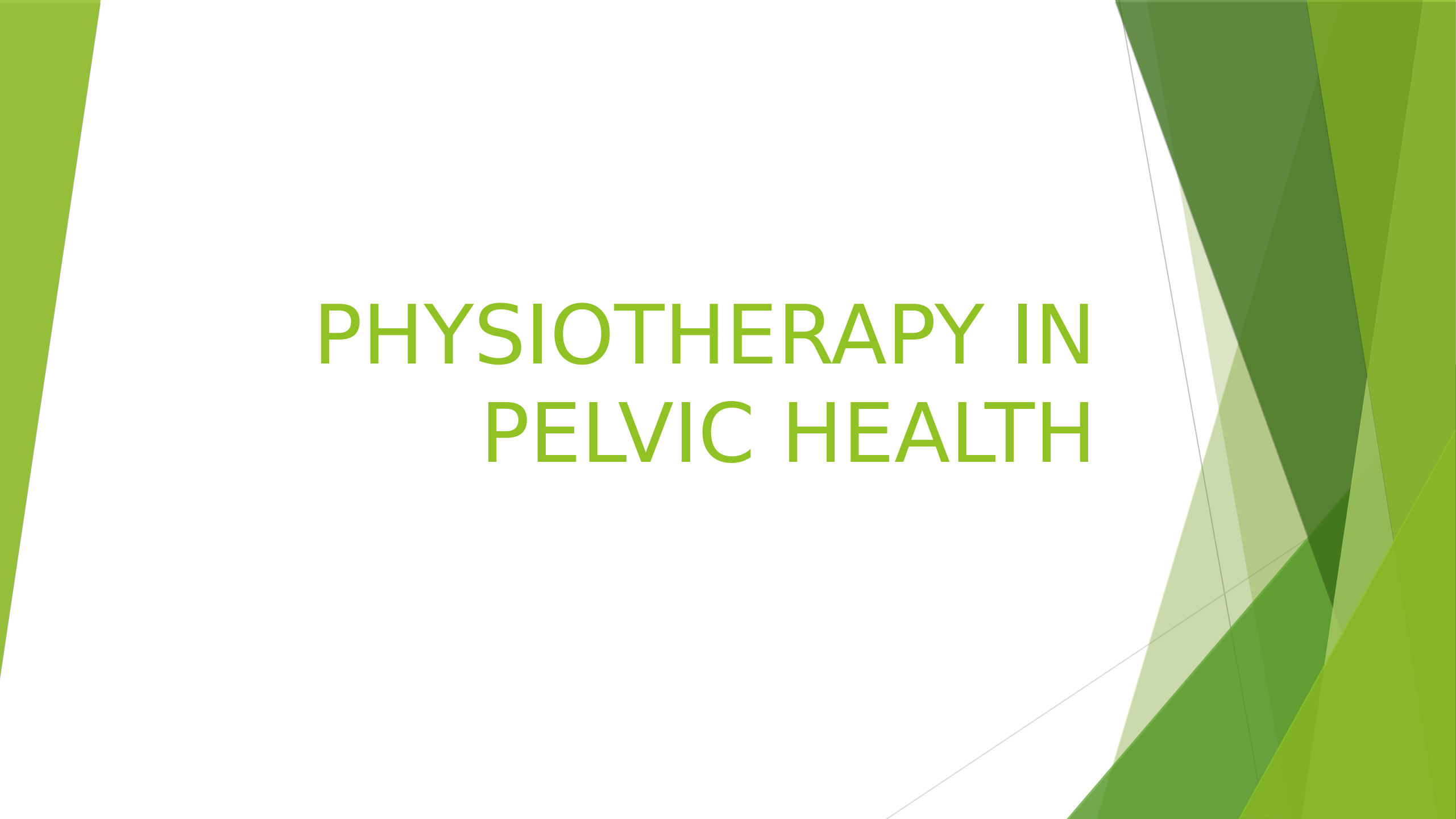
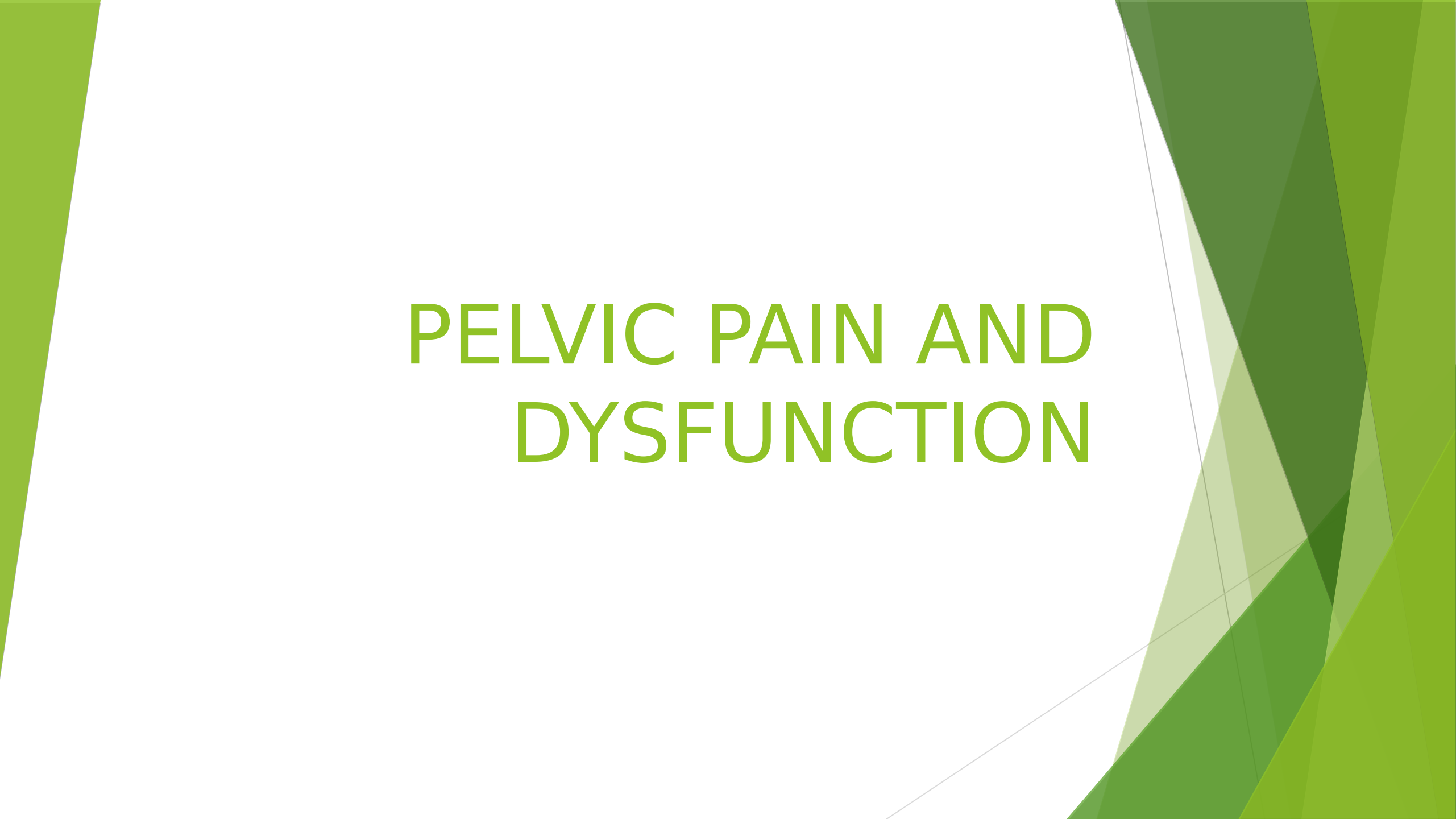


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PHYSIOTHERAPY IN PELVIC HEALTH

OBJECTIVES

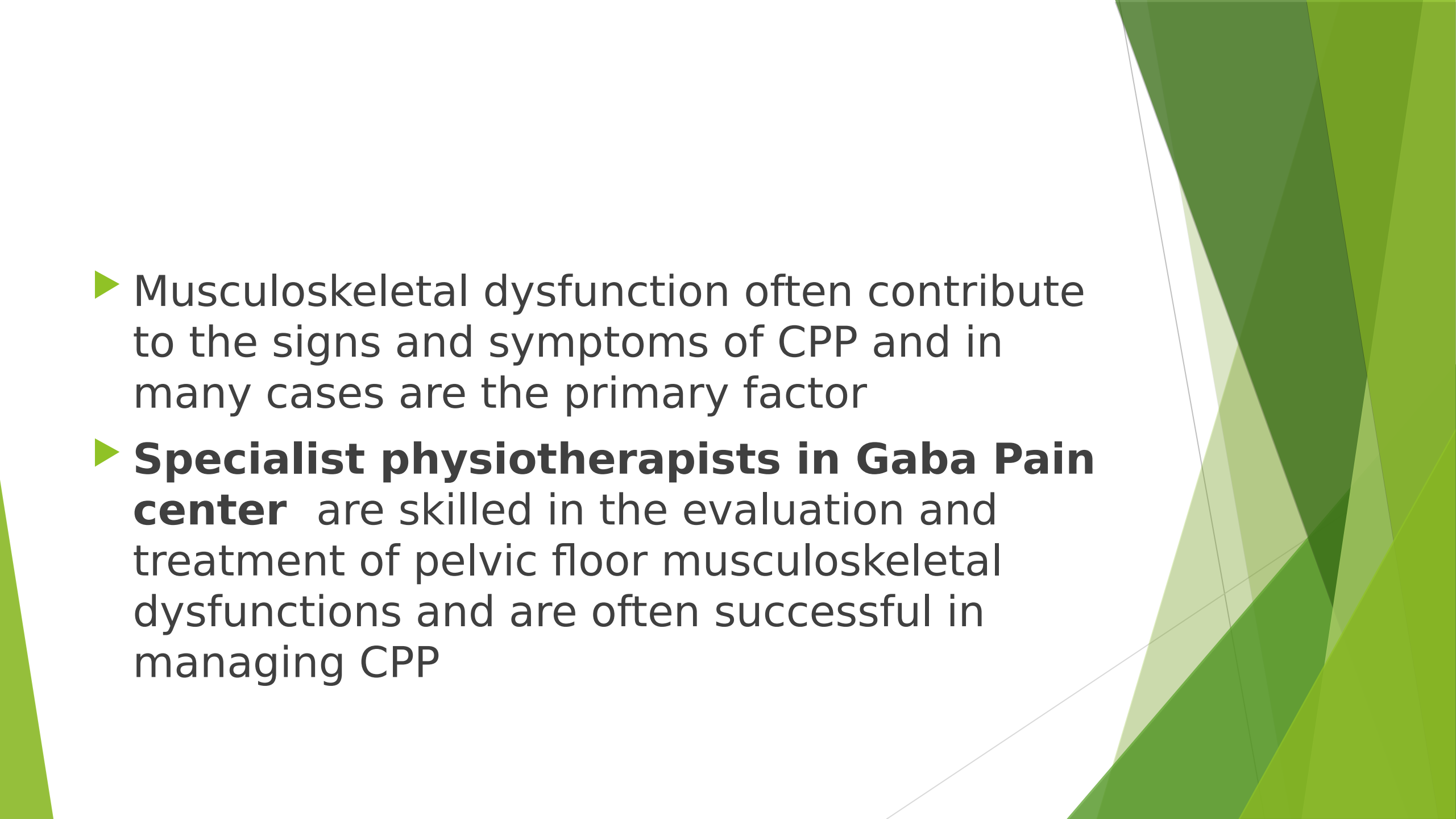
- ▶ Identify types of pelvic pain and dysfunction ,potential causes and physiotherapy approaches.
- ▶ Types of bladder and bowel dysfunctions and physiotherapy approaches
- ▶ The effects of pregnancy and delivery on the body and physiotherapy approaches

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

PELVIC PAIN AND DYSFUNCTION

Pelvic pain and dysfunction

- ▶ Pain which occurs in the perineal and /or anal area
- ▶ Pain in the lower abdomen, low back and /or pelvic girdle
- ▶ Pain may often affect other areas ,making defecation and/or penetration painful or can cause bowel /bladder urgency/frequency

- 
- The background of the slide features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.
- ▶ Musculoskeletal dysfunction often contribute to the signs and symptoms of CPP and in many cases are the primary factor
 - ▶ **Specialist physiotherapists in Gaba Pain center** are skilled in the evaluation and treatment of pelvic floor musculoskeletal dysfunctions and are often successful in managing CPP

FREEQUENTLY SEEN PELVIC PAIN DIAGNOSES

- ▶ Endometrial adhesion or nodules on pelvic ligament
- ▶ Referred from the low back or spine
- ▶ Pelvic trigger points
- ▶ Fibromyalgia
- ▶ Abdominal or perineal scar adhesions
- ▶ Levator ani syndrome
- ▶ Pelvic relaxation
- ▶ Coccydynia
- ▶ Pelvic fracture
- ▶ Pudental nerve entrapment
- ▶ Child birth
- ▶ Pelvic floor dysfunction

TYPES OF PELVIC FLOOR - CLASSIFICATION

▶ OVERACTIVE PELVIC FLOOR

muscles do not relax and may even contract when relaxation is needed such as when urinating or having a bowel movement

▶ UNDERACTIVE PELVIC FLOOR

Unable to voluntarily contract when this is appropriate

▶ NON FUNCTIONING PELVIC FLOOR

Pelvic floor muscles with no tone palpable

▶ SHORT PELVIC FLOOR

Usually without increased muscle activity

Doesn't respond to palpation with normal spring

Muscle feel like "firm shelves and violin strings"

Weakness due to shortened length of muscle

TREATMENT WE OFFER IN GABA

- ▶ electrical stimulation(external)and heat application
- ▶ Stretching ,strengthening,stabilization,muscle energy techniques, behavioral activities, progressive exercise program
- ▶ Group and individual gym training sessions
- ▶ Group and individual hydrotherapy sessions for appropriate patients

GABA OFFER WELL DESIGNED PHYSIOTHERAPY TREATMENT

treatment	Specific intervention	outcome
Therapeutic exercises	.Pelvic floor strengthening .Stretching and strengthening of pelvic girdle muscles .aerobic exercises	.optimal function of pelvic muscles .improved fitness
Relaxation exercises	.Jacobson techniques .autogenic relaxation techniques .muscle discrimination techniques	.Increased awareness of muscle tension .coordination of pelvic floor with breathing and lifting
Postural education Functional training	.With ADL's .with positions that create pain	.improved alignment of trunk and pelvis to enhance sitting and standing tolerance
Electrotherapy	.TENS .High volt pulsed current(HVPC) .IFT	.pain management .muscle stimulation for fatigue or general tonus reduction
Thermal agents	.IRR .Hot packs	.relieves pain .increase blood flow

BOWEL AND BLADDER DYSFUNCTION

- ▶ Urinary incontinence
- ▶ Voiding dysfunction
- ▶ Bowel incontinence
- ▶ Constipation

Urinary incontinence(bladder leakage)

- ▶ Condition in which involuntary loss of urine is a social or hygienic problem
- Attitude towards incontinence
 - .most people do not understand treatment option
 - .studies show an average of 7-9years for someone to seek treatment
 - .social isolation may occur
 - .quality of life affected

➤ Impact of Incontinence

.affects 13 million people of all ages

.women are twice as likely as men to be incontinent

.as many as 30% of men and women over the age of 60 living at home experience some bladder control problems

.cost estimated at 10+ billion annually

Causes of incontinence

- ▶ Overactive bladder
- ▶ Weakness of muscles that support and hold the bladder in place
- ▶ Weakness of the urethral sphincter and muscles
- ▶ Blocked urethra
- ▶ Hormone imbalance
- ▶ Neurological disorders and immobility

Common types of incontinence

- ▶ Stress incontinence
- ▶ Urge incontinence
- ▶ Mixed incontinence
- ▶ Overflow incontinence
- ▶ Functional incontinence

- ▶ Stress incontinence: involuntary loss of urine during physical exertion

Eg: laughing, coughing, running etc.

- ▶ Urge incontinence: involuntary loss of urine with a strong need/urge to go to the bathroom
- ▶ Mixed incontinence: a combination of both stress and urge incontinence
- ▶ Overflow incontinence: the involuntary loss of urine from an overfull bladder ,often in the absence of any urge to urinate
- ▶ Functional incontinence: a form of incontinence in which a person is usually aware of the need of urinate, but for one or more physical or mental reasons ,they are unable to get to a bathroom

TREATMENT FOR INCONTINENCE IN GABA

- ▶ We physiotherapists in Gaba focuses on
 - Strengthening ,relaxation, and muscle coordination exercises
 - Behavioral techniques
 - (There are surgical techniques and pharmacological treatments .along with these treatments physiotherapy can in cooperate to get optimal outcome)

Voiding dysfunction

- ▶ Voiding dysfunction is a broad term used to describe conditions where there is poor coordination between the bladder muscles and the urethra which results in incomplete relaxation or over-activity of the pelvic floor muscles

Physiotherapy treatment we provided in Gaba

- ▶ Bladder training
- ▶ Pelvic floor relaxation
- ▶ Biofeedback
- ▶ Manual therapy
- ▶ Internal self mobilization

BOWEL INCONTINENCE

- ▶ Urge incontinence: being unable to resist the urge to defecate.
- ▶ Passive incontinence: bowel leakage in which person is unaware of the need to pass the stool

PHYSIOTHERAPY TREATMENT WE FOCUS

- ▶ Patient education
- ▶ Muscle relaxation(biofeedback)
- ▶ Strengthening exercises
- ▶ PF muscles control/awareness /co-ordination
- ▶ Home exercises program: depend upon what is indicated

The effects of pregnancy and delivery on the body and physiotherapy approaches

- ▶ Treatment for musculoskeletal pain
- ▶ Exercise ideas and guidelines
- ▶ Postpartum care for mom

Effects of pregnancy

> hormonal

- ▶ Tissue laxity

- ▶ Variable blood sugar level-gestational diabetes

- ▶ Increased fat storage

> Respiratory changes

- ▶ Diaphragm rises, ribs spread

- ▶ Decreased efficiency of breathing

- ▶ Decreased space of brachial plexus

> Musculoskeletal

- ▶ Posture
- ▶ Increasing body weight
- ▶ Strain on joints
- ▶ Weakness from stretched muscles
- ▶ More susceptible to injury

Areas of exercise emphasis

► Pelvic musculature

-muscle weakness due to:

- .hormonal changes
- .weight of baby
- .stress of delivery

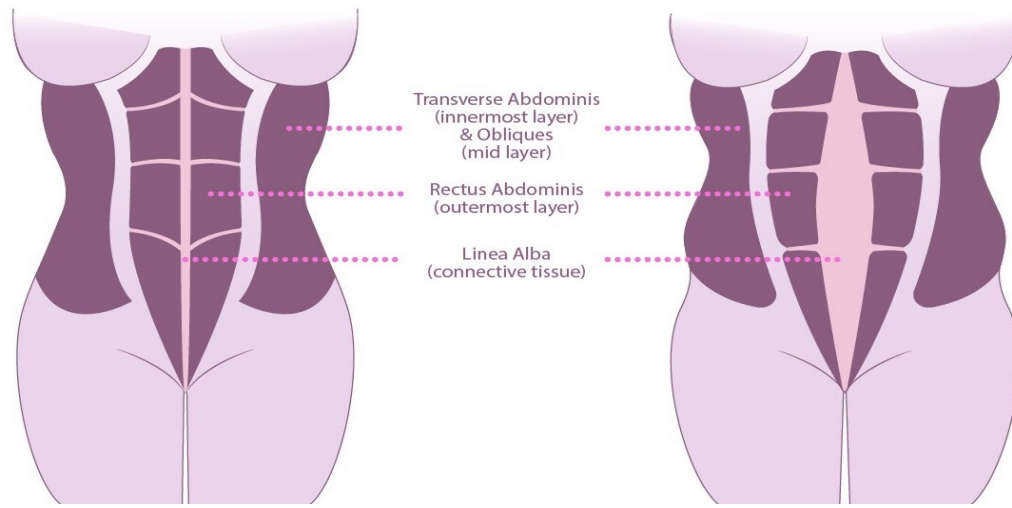
➤ Strengthening of pelvic floor muscles:

to avoid or treat urinary or fecal incontinence
treat pelvic pain issues

► Cardiovascular fitness

- .weight loss
- .increase stamina for the physical challenges to motherhood

► Diastasis recti



- linear separation of the abdominal wall (rectus abdominus) to accommodate the growing fetus
- pelvic floor pain/or inflammation after delivery
- C-section scarring
- Symphysis pubis separation

Physiotherapy approaches

► **PRENATAL**

- .stretching exercises/yoga
- .strengthening exercise
- .hydrotherapy
- .electrotherapy modalities
- .enhance muscle relaxation
- .emotional boost

SELECTED EXERCISE TECHNIQUES

- A. Postural exercise.
- B. Abdominal exercise
- C. Stabilization exercise
- D. Pelvic motion training & strengthening.
- E. Modified UL & LL strengthening.
- F. Perineum & adductor flexibility.
- G. Relaxation & breathing exercise

A. POSTURAL EXERCISES

- ▶ STRETCHING EXS
- ▶ STRENGTHENING EXS

B.ABDOMINAL EXERCISES(corrective exercises for Diastasis Recti)

- ▶ Head lift
- ▶ Head lift with pelvic lift



- ▶ Trunk curls
- ▶ Leg sliding

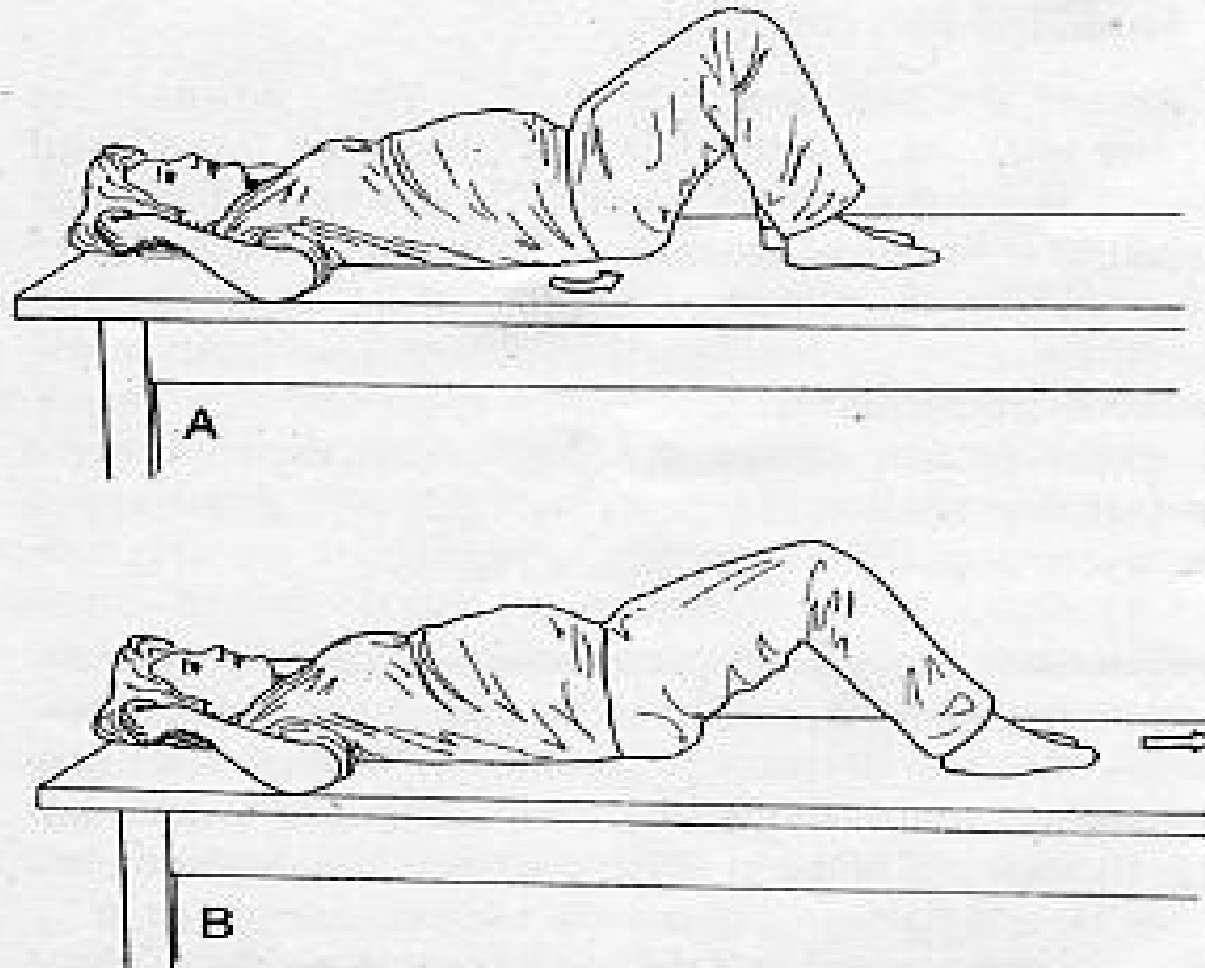
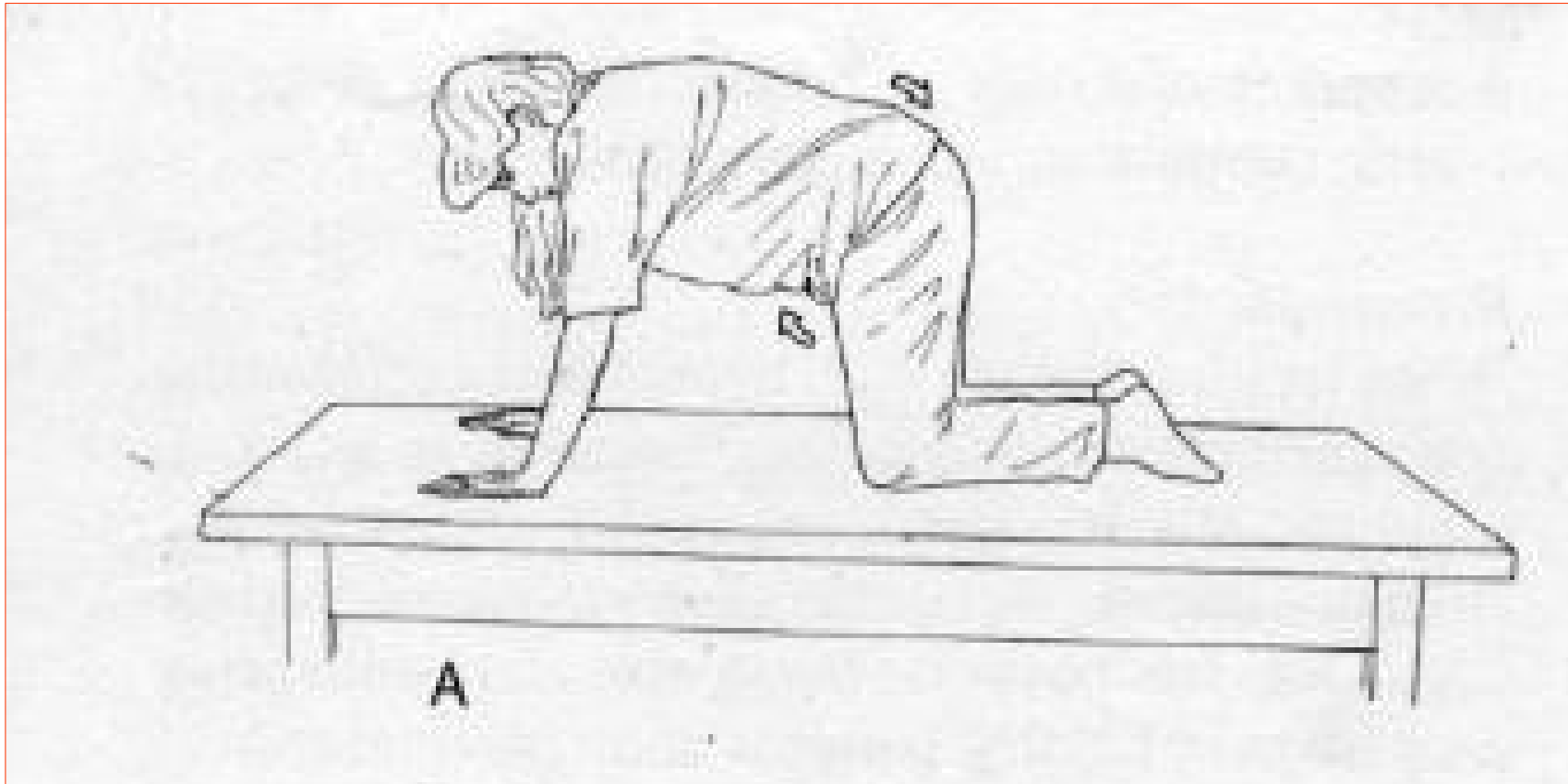


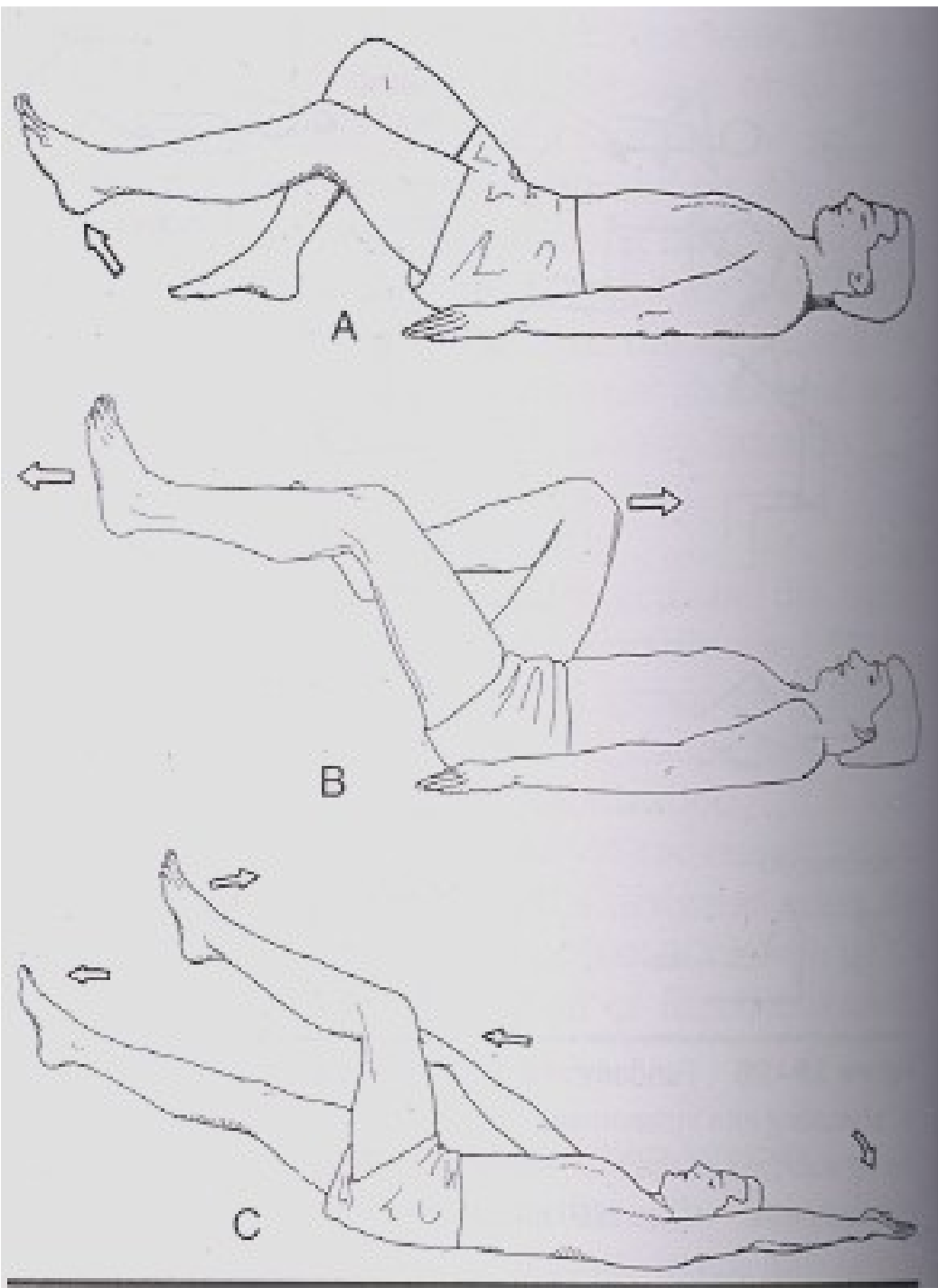
Figure 17-9 Leg-sliding. (A) Hook-lying with posterior pelvic tilt. (B) Maintain pelvic tilt as the feet slide along the floor away from the body.

► Quadruped pelvic tilt Ex's



C-STABILIZATION EXERCISES

- ▶ For developing dynamic control of the pelvis & LL .
- ▶ These may be performed throughout the pregnancy & postpartum period.
- ▶ caution – the women should maintain a relaxed breathing pattern & exhale during the exertion phase of each ex.
- ▶ Alternate hip & knee extension with one leg stationary on a mat.
- ▶ Progression is alternate hip & knee extension & flexion with both LL moving.



D. PELVIC FLOOR EXERCISES

Isometric exercise. / Kegel exercise.

- ▶ Instruction - to tighten the pelvic floor as if attempting to stop urine, & hold for 3 to 5 sec.
- ▶ This exercise is valuable in treating
URINARY INCONTINENCE

E. MODIFIED UL & LL EXERCISES

1. Modified push ups /standing pushups
2. Hip extension
 - a. supine bridging



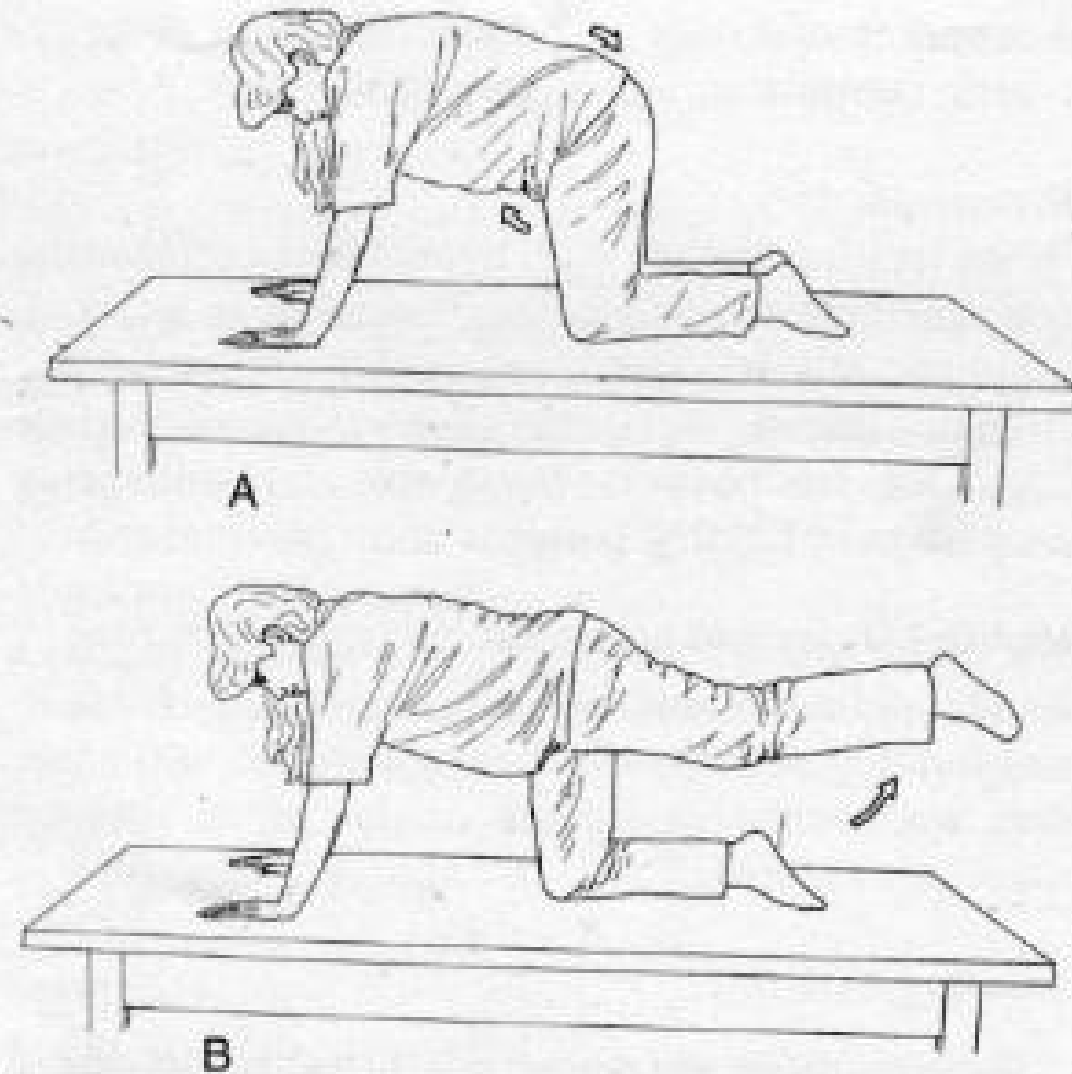


Figure 17-10 All-fours leg-raising. (A) Patient assumes quadruped position with posterior pelvic tilt. (B) Leg is raised only until it is in line with the trunk.

3. Modified squatting

These are used

- ▶ To strengthen the hip & knee extensor.
 - ▶ Stretch the peroneal area.
-
- a. Supported squatting using a chair or wall.
 - b. Wall slide.

F- PERINEUM & ADDUCTOR FLEXIBILITY

► SELF STRETCHING



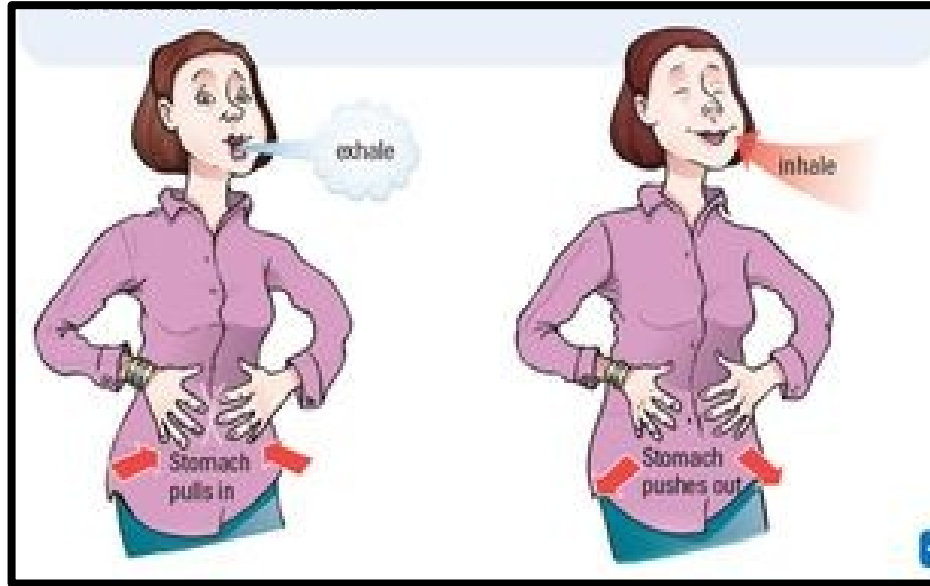
POST NATAL PHYSIOTHERAPY

- ▶ The postnatal period is generally distributed into three distinct, but continuous phases:

- ▶ • Acute Phase: 24 hours immediately following delivery
- ▶ • Sub-Acute Phase: 2-6 weeks following delivery
- ▶ • Late Phase: 6 weeks - 6 months following delivery

Specific Interventions

Diaphragmatic Breathing



It activates the entire torso and helps you to relax.

Technique of doing diaphragmatic breathing.

- Breath in through your nose and let your stomach expand.
- Breath out through your mouth and pull your stomach towards your spine.
- Repeat the exercise several times.

► **IT PROMOTES**

- *efficient respiration*
- *Bring awareness to breath control and postural control*
- *Enhance relaxation*
- *Improve core muscle stability.*

The role of diaphragmatic breathing exercise on urinary incontinence treatment: A pilot study

Nevin Toprak ¹, Selva Sen ², Berrak Varhan ³

Affiliations + expand

PMID: 35248263

DOI: [10.1016/j.jbmt.2021.10.002](https://doi.org/10.1016/j.jbmt.2021.10.002)

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Abstract

Objective: The main aim of this pilot study was to examine the effect of diaphragmatic breathing exercise on urinary incontinence treatment. The secondary purpose was to compare the effect of pelvic floor muscle exercises and diaphragmatic breathing exercises on urinary incontinence women.

Design: Participants were randomized into two groups: pelvic floor muscle exercises (Group PFM n = 20) and diaphragmatic breathing exercises (Group DB n = 20). Exercise programs consisted of 1 set of contractions per day and each set included 30 repetitions for 6 weeks. Women were asked to complete forms of Incontinence Impact Questionnaire (IIQ-7) and the Urogenital Distress Inventory (UDI-6), Incontinence Quality of Life (I-QOL), and Overactive Bladder (OAB-V3) before starting the program and again at the end of the 6-week program.

Results: IIQ-7, I-QOL, and OAB-V3 scores significantly improved in both groups, after exercises. There were no difference between groups in the post-exercise scores. Total score of the UDI-6 was statistically significantly decreased higher in the DB exercises group. UDI-6 Urge Symptoms decreased statistically significantly only in the DB exercises group. Even though there was a decrease in the PFM group, but it was not significant.

Conclusion: Diaphragmatic breathing exercises may be an alternative to pelvic floor muscle exercises in the treatment of urinary incontinence. CLINICALTRIALS.

PELVIC FLOOR EXERCISES

- ▶ Pelvic floor muscle exercises are vital for addressing pelvic pain, urinary and fecal incontinence, and sexual dysfunction.
- ▶ Exercises to strengthen pelvic floor muscles includes
 - Kegel exercises,
 - bridges,
 - squats, and more.
- ▶ Pelvic floor exercises may help to improve pelvic floor weakness and enhance bowel and bladder control.

HOW TO DO THE PELVIC FLOOR EXERCISES

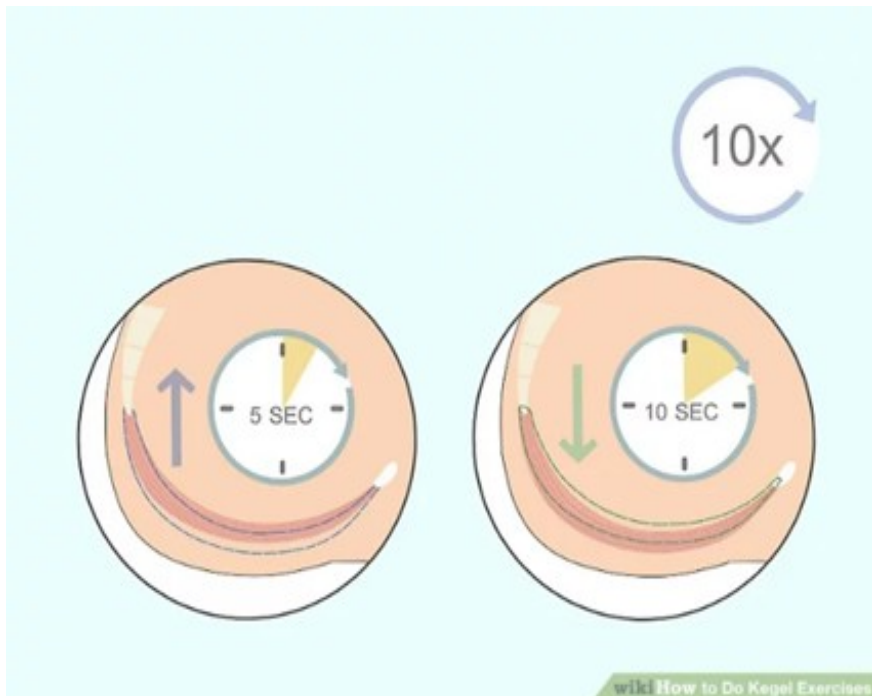
Step 1: Squeeze the pelvic floor muscles for 5 sec



Step 2: Release the muscles for 10 sec



Step 3: Repeat the exercise 10 times



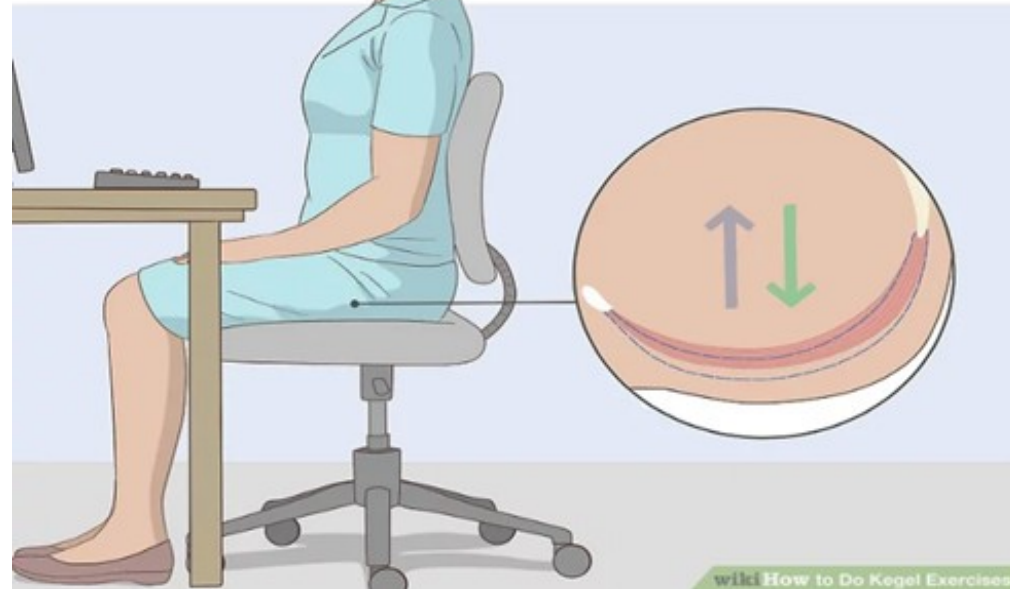
Step 4: build toward squeezing the pelvic floor muscles for 10 sec at a time



Step 5: try pull in kegels



Step 6: make kegels exercise in part of daily life



Pelvic floor physical therapy in the treatment of pelvic floor dysfunction in women

Shannon L Wallace ¹, Lucia D Miller ², Kavita Mishra ¹

Affiliations + expand

PMID: 31609735

DOI: [10.1097/GCO.0000000000000584](https://doi.org/10.1097/GCO.0000000000000584)

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Abstract

Purpose of review: To describe the principles of pelvic floor physical therapy (PFPT), review the evidence for PFPT as a treatment for pelvic floor dysfunction, and summarize the current recommendations for PFPT as a first-line conservative treatment option for pelvic floor disorders.

Recent findings: Pelvic floor dysfunction can cause voiding and defecation problems, pelvic organ prolapse (POP), sexual dysfunction, and pelvic pain. PFPT is a program of functional retraining to improve pelvic floor muscle strength, endurance, power, and relaxation in patients with pelvic floor dysfunction. Based on the available evidence, PFPT with or without supplemental modalities can improve or cure symptoms of urinary incontinence, POP, fecal incontinence, peripartum and postpartum pelvic floor dysfunction, and hypertonic pelvic floor disorders, including pelvic floor myofascial pain, dyspareunia, vaginismus, and vulvodynia. Currently, there is conflicting evidence regarding the effectiveness of perioperative PFPT before or after POP and urinary incontinence surgery.

Kegel Exercise Training Program among Women with Urinary Incontinence

[Ahmad H. Abu Raddaha](#)^{1,*} and [Elsayed H. Nasr](#)^{1,2}

Masafumi Koshiyama, Academic Editor

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Abstract

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A common condition with a large global prevalence and a persistent medical taboo for many people is urinary incontinence. Around one in three women globally are impacted by it. The most frequently suggested physical therapy treatment for women with stress incontinence or urge incontinence is Kegel exercise (also called pelvic floor muscle training). This study aims to assess the effects of a Kegel exercise training program among women with urinary incontinence. The study was conducted at three

everyday activities. Following the adoption of the Kegel exercise training program, there was a substantial improvement in both urine incontinence and quality of life.

Pelvic floor exercises during and after pregnancy: a systematic review of their role in preventing pelvic floor dysfunction

Marie-Andrée Harvey ¹

Affiliations + expand

PMID: 12806450

DOI: [10.1016/s1701-2163\(16\)30310-3](https://doi.org/10.1016/s1701-2163(16)30310-3)

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Abstract

Objective: To review the literature on the origin, anatomical rationale, techniques, and evidence-based effectiveness of peripartum pelvic floor exercises (PFEs) in the prevention of pelvic floor problems including urinary and anal incontinence, and prolapse.

Conclusion: Postpartum PFEs appear to be effective in decreasing postpartum urinary incontinence. Data regarding the effect of PFEs on prevention of anal incontinence are lacking, and also on its prevention of prolapse.

KEGELS (FOR BEGINNERS)

- ▶ Kegel exercises focus on tightening and holding the muscles that control urine flow.
- ▶ To perform this exercise, a person should:
 - Sit in a comfortable position, close the eyes, and visualize the muscles that can stop urine flow.
 - Tighten these muscles as much as possible.
 - Hold this position for 3–5 seconds. It should feel as though the muscles are lifting up as a result of the squeezing.
 - Release the muscles and rest for several seconds.
 - Repeat this up to 10 times.
 - People can vary this exercise by doing it while standing, lying down, or crouching on all fours.

LONG SQUEEZES

1. Lie, stand or sit with your knees slightly apart
2. Slowly tighten the pelvic muscles around your rectum and vagina
3. Squeeze both areas as hard as you can
4. Hold for 10 seconds and relax

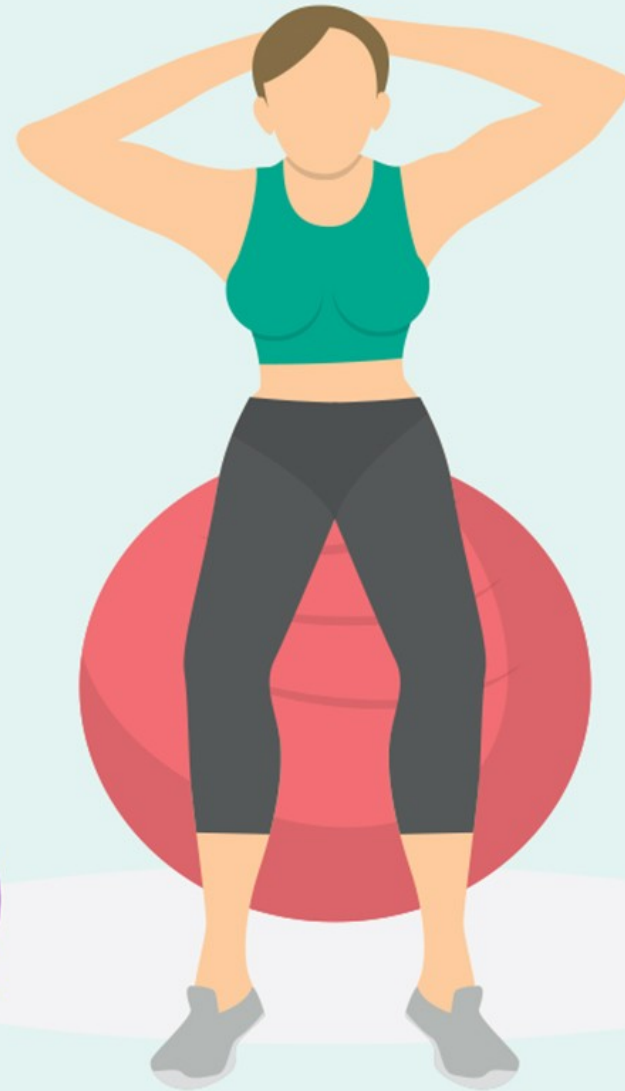


SQUEEZE AND RELEASE

- ▶ This rapid movement helps the pelvic floor muscles respond quickly.
- ▶ To perform this exercise, a person should:
 - Sit in a comfortable position.
 - Picture the pelvic floor muscles.
 - Squeeze them as quickly as possible and release them without trying to hold the contraction.
 - Rest for 3–5 seconds.
 - Repeat this 10–20 times per set.
 - Two sets per day.

SHORT SQUEEZES

1. Lie, stand or sit, with your knees slightly apart
2. Quickly squeeze the pelvic muscles around your rectum and vagina
3. Hold for 2 seconds, and release



BRIDGING (ADVANCED)

- ▶ While the bridge exercise primarily strengthens the buttocks, it also helps the pelvic floor.
- ▶ To do this exercise:
 - ▶ Lie on the back, bend the knees, with the feet flat on the floor about hip-width apart. Keep the arms by the sides with the palms facing down.
 - ▶ Contract the buttocks and pelvic floor muscles, and lift the buttocks several inches off the ground.
 - ▶ Hold this position for 3–8 seconds.
 - ▶ Relax the buttocks and pelvic floor muscles, and lower the buttocks to the ground.
 - ▶ Repeat this up to 10 times per set.
 - ▶ Rest, then perform up to two additional sets.



BRIDGE POSITION

1. Lie on your back with your knees bent and feet flat on floor, hip width apart
2. Take a deep breath in, squeeze and lift your pelvic muscles. Keep breathing
3. Lift your hips. Hold the position for 10 seconds
4. Lower down and release your pelvic floor
5. Rest for 10 seconds



SQUATS

A person should only start doing squats after becoming comfortable doing Kegels in a stationary or bridge position.

To perform a squat, a person should:

- Stand with the feet hip-width apart, keeping them flat on the floor.
- Bend at the knees to bring the buttocks toward the floor, going only as low as is comfortable.
- Keep the back straight and tilted slightly forward. The knees should be in line with the toes.
- Focus on tightening the buttocks and pelvic floor while returning to a standing position.
- Repeat this exercise, doing up to 10 repetitions per set.



ADVANCED PELVIC FLOOR EXERCISES

WALL SQUAT

1. Stand with your back against the wall, feet hip width apart.
2. Take a deep breath, squeeze and lift your pelvic muscles and lower into a squat.
3. Hold for 10 seconds. Keep breathing.
4. Return to standing and release your pelvic floor.
5. Rest for 10 seconds



OTHER TREATMENT TECHNIQUES

- ▶ **Biofeedback**, with the use of a sensor pressure probe that is inserted into your vagina or rectum, to sense the strength of contractions of the pelvic floor muscles to help you be aware of when you are contracting or relaxing these muscles.
- ▶ **Electrical stimulation** to help elicit pelvic floor muscle activation
- ▶ **Vaginal dilators**, which are cylindrical objects of varying widths that are inserted into the vagina to gently stretch the pelvic floor muscles and allow them to relax with insertion
- ▶ **Weighted cones**, which can be inserted into the vagina or rectum, and used during contraction exercises to provide increased resistance
- ▶ **Acoustic compression therapy**, which uses sound waves to reach deep muscles.
- ▶ **Laser therapy** to help muscles heal.



Post natal approaches in GABA

- ▶ Massage therapy
- ▶ Yoga
- ▶ Pelvic floor exercise /isometric exercises/Kegels exercise
- ▶ Pain relieving modalities for pelvic pain
- ▶ Cardiovascular fitness trainings
- ▶ Individualized exercise sessions for core strengthening
- ▶ Group exercise therapy sessions to regain strength and endurance
- ▶ Coccydynia treatment
- ▶ Well equipped gym facility for strength training
- ▶ Postural correction techniques

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